

REMARKS

Claims 1-13 are pending in the application. Claims 1-13 are rejected. No amendments are submitted with this reply.

Reply to the Rejection of Claims 1-13 under 35 U.S.C. § 103(a)

The Examiner has again rejected claims 1-13 as being unpatentable over U.S. Patent No. 7,025,983 to Leung *et al.* ("Leung"). For the following reasons, applicants again respectfully traverse the Examiner's rejection of claims 1-13 as being unpatentable over Leung.

Leung discloses physiologically acceptable films, including edible films (Abstract). These edible films include pullulan as the film former and antimicrobially effective amounts of essential oils (Abstract). According to Leung's preferred method of producing essential oil-containing films, (1) water-soluble ingredients are dissolved in water to form an aqueous mixture, (2) the film forming ingredients are mixed together in powdered form to form a powdered mixture, (3) the powdered mixture is added to the aqueous mixture to form a gel; (4) stirring the gel at room temperature for some length of time; **(5) forming an oil mixture of cooling agent and essential oils; (6) adding other essential oils and surfactants to the oil mixture;** (7) adding the oil mixture to the gel and mixing until uniform; (8) deaerating the mixture to remove air bubbles; **(9) casting the mixture onto a substrate; and (10) drying the cast mixture to form a film** (col. 3, lines 16-24; col. 5, lines 25-61; claim 1).

In contrast to Leung, the present application is directed towards films onto which a substance is placed. Leung does not teach adding a substance onto a film. Rather, Leung is solely directed towards films and their manufacture. As indicated by the 10 steps outlined above, Leung teaches making its films by mixing all its ingredients together and then forming a film. In contrast, the method claims of the present invention and their dependent claims teach making the film and then adding a substance onto the film. Nowhere does Leung teach this step of adding a substance onto its films after the film is made, or provide any motivation to do so. As such, Leung does not disclose every limitation in the presently claimed invention. Accordingly, Leung does not render obvious the presently claimed invention.

In one embodiment according to the present application, the substance added to the film can be an encapsulated substance. In this regard, films according to the present invention enable one to deliver volatile substances wherein the encapsulant material is water soluble or oil soluble. By placing the substance onto the film rather than mixing the substance(s) together with the other ingredients while making the film, one avoids processing issues that could affect delivery of the substance (*see, e.g.*, p. 1, last paragraph – p. 2, first paragraph of the present Specification). Leung makes absolutely no reference to this problem and therefore provides no motivation to one skilled in the art to solve the problem of delivery of volatile ingredients according to the methods of the presently claimed invention. Instead, Leung's teaching to form an oil mixture and cast that mixture onto a substrate to dry into a film teaches away from the present.

It has been admitted by the Examiner that Leung makes absolutely no reference to the use of encapsulated substances, particularly for the delivery of volatile substances. As noted by the present invention, merely encapsulating the volatile substance may not be sufficient as processing conditions can affect the encapsulant. One skilled in the art therefore would also not learn or be motivated from Leung to prepare films wherein the volatile substance is added to the film, rather than added in the mixture of ingredients used in making the film invention (*see, e.g.*, col. 3, lines 6-9; col. 4, lines 4-8 and 15-19 of Leung).

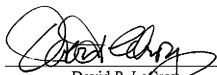
As Leung explicitly teaches adding its oil into its mixture and then forming a film from the mixture, and as Leung makes absolutely no mention to other methods of delivery of volatiles, Leung provides no implicit motivation to produce films according to the present method. As such, the Examiner's position stated at page 4 of the Action is nothing more than impermissible use of hindsight.

For at least these reasons, claims 1-13 are patentable over Leung. Withdrawal, therefore, of the rejection of claims 1-13 under 35 U.S.C. § 103(a) is respectfully requested.

Based on the above remarks, allowance of the claims is believed to be in order, and such allowance is respectfully requested.

Respectfully submitted,

Dated: 20 November 2007
NATIONAL STARCH AND CHEMICAL COMPANY
Post Office Box 6500
Bridgewater, New Jersey 08807-0500
Phone 908.683.5433
Fax 908.707.3706



David P. LeCroy
Attorney for Applicants
Reg. No. 37,869